POWER OF CHOICE.

Industry Information Paper

November 2016

ActewAGL for you

Power of Choice.

Introduction

The technology and services that are provided by Australia's energy network are changing. As buildings, vehicles and electricity supply and generation get smarter and cleaner, consumers of electricity are seeking more information, more choices and more control over their energy bills. ActewAGL Distribution recognises the importance of delivering the safe, reliable and sustainable energy solutions our customers expect.

The Australian National Electricity Market and businesses within the electricity industry are closely regulated through the National Electricity Law and associated National Electricity Rules. Electricity distribution businesses, such as ActewAGL Distribution are regulated at both national and state-based level. The rules that guide the operation of the National Electricity Market are regularly reviewed and updated.

Power of Choice is a suite of reforms and changes to the electricity regulatory framework as part of a national emphasis on encouraging energy consumers to better understand their energy usage and how that impacts the electricity network. Power of Choice will provide customers with more options to manage and control their electricity consumption and energy bills. Power of Choice will also allow energy companies, including distribution network businesses such as ActewAGL Distribution, to better respond to technology and other market changes.

Power of Choice will have a significant impact on how distribution network businesses, such as ActewAGL Distribution, operate. It is important to us that our local customers and business community understand these changes so that we can work together, as the new rules take effect, to minimise any negative or unintended impacts of the transition process.

This paper explains the Power of Choice changes, their potential impacts on local businesses such as electricians, builders and property developers and the long term benefits for our customers.

Explaining some terms:

Electricity network – the network of poles, wires and substations that transfer electricity from the source of generation to a customer's premises.

Network business – a business that owns and operates an energy network. ActewAGL Distribution is a network business.

Retailer – the company that sells electricity to the customer. ActewAGL Retail, Energy Australia and Origin Energy are all retailers.

Metering business – a new type of business that will own, operate, or read, electricity meters on behalf of retailers and their customers.

Want to know more about Australia's energy market and the electricity grid?

Here are some useful references:

www.hellogrid.com.au

www.aemo.com.au

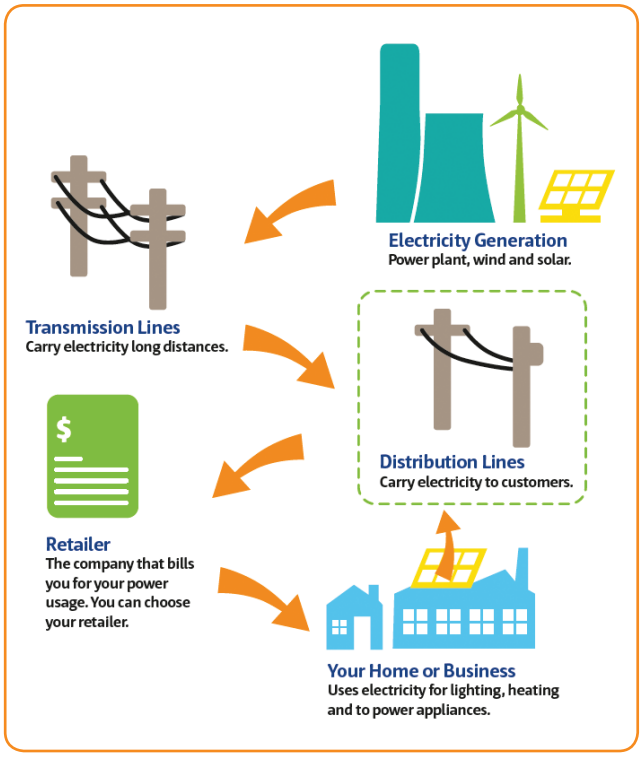
www.aemc.gov.au

The electricity network.

The ActewAGL Distribution partnership is equally owned by Jemena Networks (ACT) Pty Ltd (a subsidiary of SPSG (Australia) Assets Pty Ltd) and Icon Distribution Investments Ltd (A subsidiary of Icon Water Ltd). Icon Water Ltd is wholly owned by the ACT Government.

ActewAGL Distribution owns and operates the electricity network in the ACT. This network is made up of 2,365 kilometres of overhead electricity lines, 2,904 kilometres of underground cables and serves around 180,000 customers.

Diagram 1.The energy market



Who is ActewAGL Distribution?

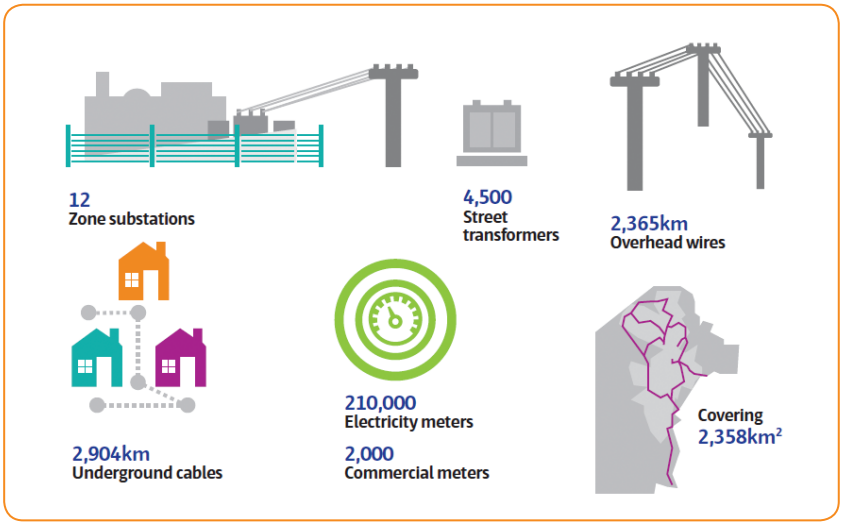
We are responsible for the power lines, gas pipelines and other infrastructure required to transport electricity and gas through the network to your home or business.

ActewAGL Distribution undertakes network maintenance, connects new customers, plans and constructs new infrastructure, provides emergency responses, and installs, replaces and reads customer's energy meters.

The cost of the services that ActewAGL Distribution provides is passed on to customers through the retail companies that you buy your electricity or gas from, such as ActewAGL Retail, Energy Australia or Origin Energy.

ActewAGL Retail is a separate and distinct business to ActewAGL Distribution.

Diagram 2. ActewAGL Distribution's network assets



What is Power of Choice?

The Power of Choice Review was undertaken by the Australian Energy Market Commission. Its recommendations for changes to the National Electricity Market have been endorsed by state and federal governments and will be implemented over the next 12 to 18 months.

Power of Choice is part of a national emphasis on encouraging Australian energy users to make more informed choices about how and when they use electricity. Power of Choice changes will provide customers with better information and more options so that they can better manage their energy bills.

Power of Choice will enable customers to better manage their energy bills by:

- improving the information available to customers and, through education, build better understanding of how to manage their energy bills
- rewarding customers that change their energy use to minimise demand on the electricity network
- maximise the benefits of technology to minimise energy network costs
- having greater choice through their retailer of the types of metering services they can access

A typical meter that may be installed under Power of Choice.

Why is it important to understand how and when we use electricity?

Network costs associated with delivering electricity to homes and businesses are charged directly to customers through their retail energy provider (such as ActewAGL Retail, Energy Australia or Origin). Network costs include the construction, management, maintenance and expansion of the electricity network - that is the poles, wires and substations that transport electricity.

Network capacity and costs are directly linked to how customers use energy. Networks are built to cope with the likely highest demand to be placed on the electricity network at any given time. This is known as peak demand.

Peak demand occurs when large numbers of electricity users are accessing large amounts of energy at once. For example, in Canberra we have high demand on a winter morning when families are getting up, turning on their heaters, making breakfast, putting on the dishwasher etc. For businesses high level of demand is a bit later in the morning when the office air conditioner and computers and other equipment is turned on. We reach peak demand only a few days a year.

Even though, for the rest of the day, demand on the network is lower, the network needs to be built and maintained at a capacity to cope with the peak demand period. The costs of meeting this demand are passed directly on to customers through their electricity tariffs.

Some households and businesses don't use much power during these peak periods, for example restaurants that open in the evening, bakeries that cook overnight, or retired people who may have breakfast later and put the dishwasher on in the afternoon. These customers are helping to reduce the costs of building a bigger electricity network and these savings can be passed onto customers through different pricing options.

As technology changes we will all have more opportunity to change the way we use electricity. Solar power, battery storage and even timers on our appliances have an impact on how much demand customers place on the electricity network and have the ability to save everyone money.

To take advantage of technology and change the way they use energy, customers need more information. Changes under Power of Choice will provide electricity customers with better information and more choices to help manage their energy bills.

What changes will occur under Power of Choice?

Power of Choice represents a significant change to the operation of electricity networks across Australia. Many of these changes relate to the rules and regulations that apply to network businesses. The key changes can be grouped into three areas.

Network prices – new rules on how electricity network prices are developed and structured to provide more efficient and flexible pricing options to customers and to encourage network providers to continue to be efficient when building, operating and maintaining energy networks.

Customer information – new rules will make it easier for customers to access their electricity consumption data from either their retailer or the network business.

Electricity metering – shifting responsibility for ownership, maintenance and reading of electricity meters away from network businesses. From 1 December 2017, electricity metering will be opened up to competition so that electricity retailers have the choice of who provides, installs and reads meters on behalf of their customers. This will see the creation of new 'metering businesses'. From this time all new meter installations will be smart meters.

There will be a number of new metering businesses and roles created. One of those new roles will be the 'metering coordinator' who will be independent of both our network business and your energy retailer. The metering coordinator will be responsible for appointing the meter installers and the meter data provider who will collect customer energy usage data. This data will be provided to the national market, the network business and the retailer.

At the moment, the network business is responsible for installing the connection between a customer installation (a house, apartment or business) and the network, as well as installing a meter to monitor energy consumption. The Power of Choice reforms change this arrangement and will see the retailer become responsible for the installation of a meter via the metering coordinator and the metering provider. It is this change that is most significant for electricians and developers.

Diagram 3. Energy market incorporating the new metering business

How will Power of Choice impact our customers?

ActewAGL Distribution is currently working to understand the implications of the rule changes and how we need to change our business to ensure we are compliant with the new rules.

Some Power of Choice requirements are still to be finalised by the regulators. Until we have considered the necessary changes to our business it is hard to know what the impacts will be for our customers. Some of the impacts we expect are explained below, however we are seeking feedback and input from our customers on any other potential impacts that we need to take into consideration.

Construction industry

The biggest area for potential impact (outside electricity market operators) will be in the broader construction industry.

Builders and property developers will see a number of changes associated with installing, connecting and upgrading meters on new or existing building. These changes may include:

- potential new rules around access requirements and the location of meters as may be determined by the new metering businesses
- the need to liaise with the new metering businesses when seeking to install meters and connect electricity
- the opportunity to negotiate with an energy retailer directly about meter costs and installation
- benefits of increased competition in meter installation.

Electricians will be impacted by the shift of meter ownership and management from ActewAGL Distribution, which will mean that more businesses will then able to provide meter installation services. These impacts may include:

- changes in installation rules and requirements, as these will now be determined by retail businesses in discussion with the metering businesses
- technical changes such as switchboard layout and the location of the distribution network boundary and its interface with the consumer's network
- licencing and training opportunities to add new metering capacity to existing unrestricted licences.

Electrical training providers will offer competencies that enable electricians to perform metering works that they are not currently permitted to do. It is anticipated that these requirements will be based on existing training programs used in other Australian jurisdictions.

Power of Choice means the metering requirements of the energy network are open to more competition and therefore it is likely that more businesses will be providing meter installation services on behalf of energy retailers. The ACT Government will need to play a role in regulating these businesses and ensuring that the new services they provide are safe and compliant.

Energy consumers

For energy consumers most of the changes will happen behind the scenes between the retailer, the new metering company and the network business. Consumers may not even notice the changes; however the following benefits will flow through to them.

- Consumers will be able to ask their retailer and distributor for more information about their energy consumption. Depending upon what type of meter you have, this can provide useful insight into how your energy consumption impacts your energy bill and potential areas for savings.
- Consumers will have more choice about what type of meter they have by asking the various retailers.
- Both residential and commercial tariffs will change to allow more options for consumers to select the best tariff to suit their consumption levels.

There may also be changes to the way that faults and emergencies are managed when they involve meters and individual homes.

During 2017 ActewAGL Distribution and the ACT Government will be providing customers with information about the changes in the energy market. This information will seek to minimise confusion, promote the benefits of Power of Choice and encourage all customers to carefully compare options provided by energy retailers to ensure they get the right energy service to suit their individual needs.

We want your feedback

We have identified some of the impacts of the Power of Choice on our customers.

Are there other potential impacts we haven't thought of?

Do you need more information from us to understand the potential impacts?

Meters matter

All customers have an electricity meter that records the amount of electricity used by the household or business over a period of time.

ActewAGL Distribution currently owns and maintains approximately 210,000 meters.

The type of meter a customer has impacts on the type of information that is collected about energy consumption.

In the ACT there are currently two types of meters used.

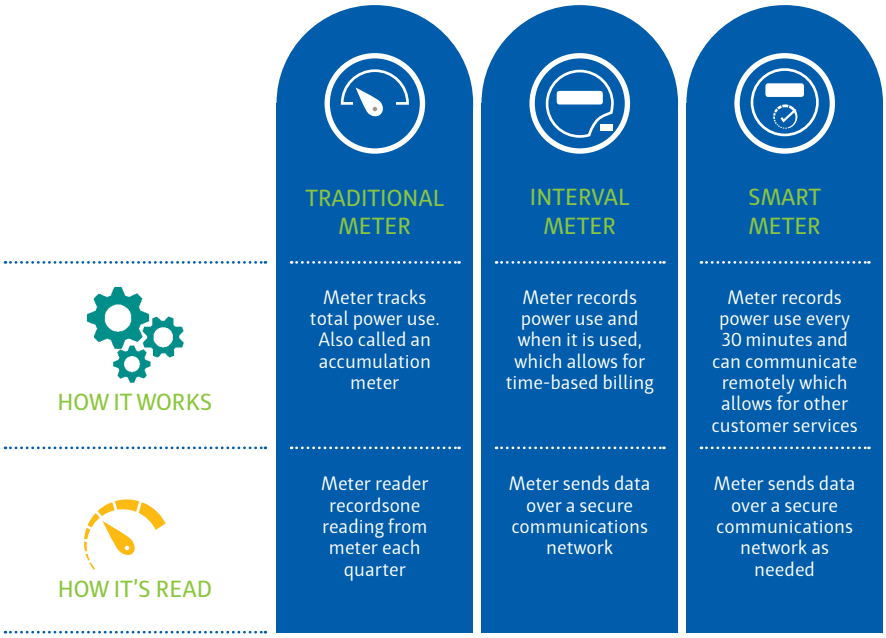
Accumulation meters that are only capable of measuring total electricity consumption; that is, they are not currently capable of measuring energy demand or the time of energy use.

Interval meters that record demand and time of energy use. Some interval meters can be remotely read, while others still require manual reading by a technician.

From December 2017 the new metering rules will require existing meters to be transitioned to more modern or 'smart' meters that can provide demand and time of use energy information, quality of supply data, and be capable of remote reading and operation. Your retailer will be responsible for arranging any meter related works and will engage someone to perform this work on their behalf but it will not be ActewAGL Distribution.

While customers can currently opt to change their meters for a fee, in the future, retailers may opt to roll out the new meters at their own cost or choose to keep a customer charge in place.

Diagram 4. Different electricity meters

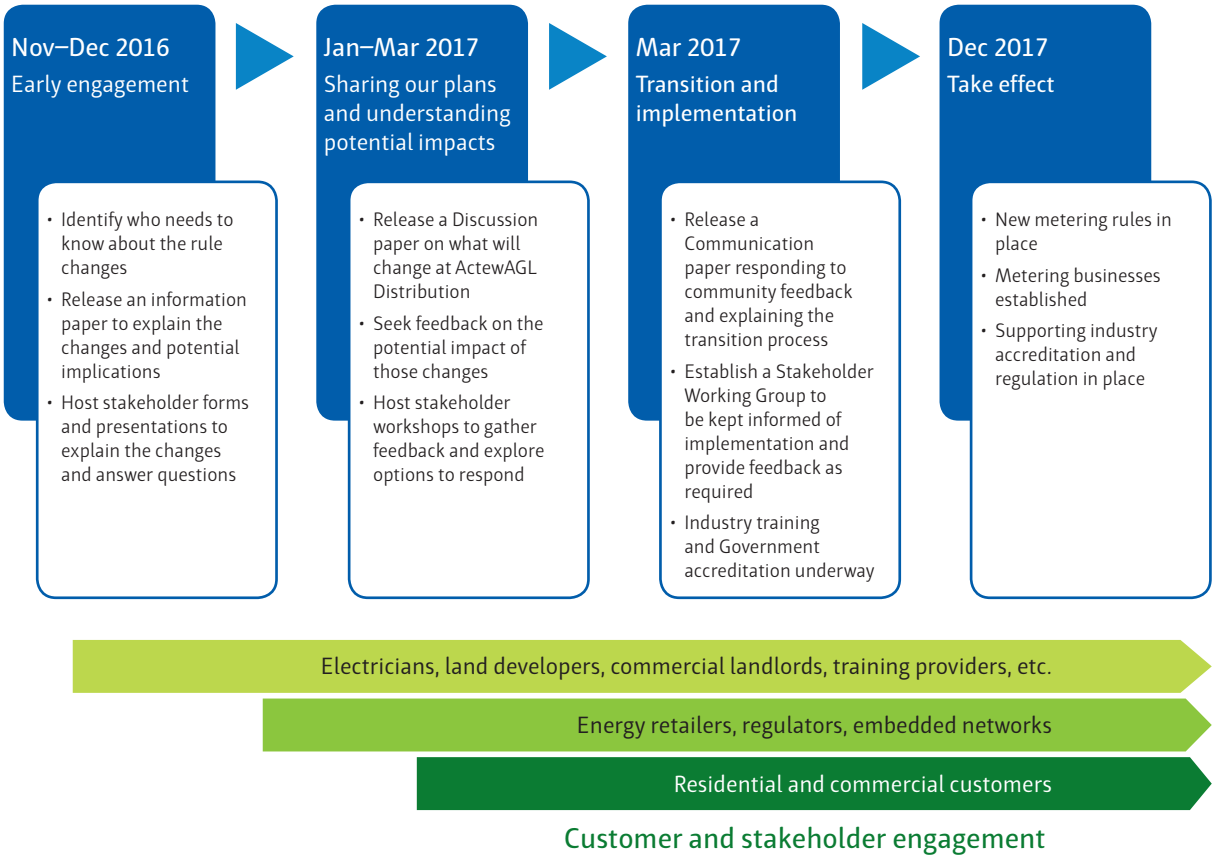


Timeframes for change.

Many of the Power of Choice changes will be implemented during 2017. As we gain a better understanding of how our business will need to change to meet the new rules we will be providing information to our customers and industry stakeholders, in particular the construction industry. We are keen to work with those impacted to ensure that transition and implementation is as smooth as possible.

In general we anticipate the following timeline of activity over the next year.

Diagram 5. Power of Choice implementation program



Staying in touch or learning more

We encourage you to keep in touch with what is happening as Power of Choice is implemented.

During November 2016 we are hosting information sessions for the construction industry to provide those businesses with early information.

During 2017 we will be issuing more information to our customers and industry stakeholders and seeking further feedback. This information will be available on our website **www.actewagl.com.au/consumerengagement**

If you would like to continue to be part of this discussion please provide your contact details to: **PowerofChoice@actewagl.com.au** and we will keep you informed as the process continues.